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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/513,687	02/25/2000	Yong-Hoon Lee	1316.1041/MDS	7481

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EXAMINER

FERGUSON, LAWRENCE D

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 01/15/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/513,687

Applicant(s)

LEE ET AL.

Examiner

Lawrence D Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 31-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other:

## **DETAILED ACTION**

### ***Response to Election***

1. This action is in response to the provisional election mailed November 27, 2001. (Group I) Claims 1-30 were provisionally elected rendering (Group II) Claims 31-38 to a non-elected species.

### ***RESPONSE TO REQUEST FOR RECONSIDERATION***

2. Applicant's election with traverse of method of making an optical disc (Group II) is acknowledged. The traversal is on the ground(s) that "claims 31 through 38 are so closely related to elected claims 1 through 30 that they should remain in the same application to preserve unity of the invention and to avoid any possibility of double patenting issue arising at some later date" is not persuasive. The search of the 2 classes and subclasses would entail the requisite serious burden as the search for method of making is not the same as the article search. The possibility of double patenting would not become an issue because Obvious Double Patenting is not permitted after a restriction requirement is made stating the two groups are patentably distinct. Additionally, the steps used in the method claims would not be expected to appear in the class/subclass of the product claims. Every optical disk is not made using the same method steps as discussed in the restriction written 08/27/01.

The requirement is deemed proper and is therefore made **FINAL**.

**Claim Rejections – 35 USC 112**

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5-6, 19, 21-26 and 29-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In claim 5, the phrase "higher than peaks of the hills" is indefinite. The phrase should be reworded to increase the clarity of the claimed language.

b. In claims 19, 22-24 and 29-30, the term "substantially" is a relative term and therefore indefinite.

**Claim Rejections – 35 USC § 103(a)**

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honguh et al. (U.S. 5,776,574).

Honguh discloses an optical recording medium comprising a substrate, an inner protective layer, recording material, reflection layer and outer protective layer (abstract

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and column 2, lines 55-61) having a land and groove (abstract) where one of the protective layers can be a dielectric layer. Honguh discloses an optical disk with a plurality of tracking guide grooves (column 5, lines 24-25). Although Honguh does not disclose the layers ordered in the manner as applicant claims, it would have been obvious to one of ordinary skill in the art to arrange the optical disc layers in the claimed order because rearranging parts of an invention involves only routine skill in the art. Although Honguh does not explicitly disclose the thickness of the protective layer, the thickness is optimizable. It would have been obvious to one of ordinary skill in the art to optimize the components because discovering the optimum or workable ranges involves only routine skill in the art.

***Claim Rejections – 35 USC § 102(b)***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated over Lee et al. (U.S. 5,470,627).

Lee discloses a double-sided optical storage disk comprising a substrate having a microstructure formed on each side surface, where the microstructure is in the form of grooves (abstract). Lee discloses formed on each of the side surfaces from the

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substrate outward are a reflective layer, dielectric layer, recording layer and transparent protective layer (column 4, lines 27-34). Lee shows hills of a peaked hood shape in figure 4.

***Claim Rejections – 35 USC § 103(a)***

9. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (U.S. 5,470,627).

Lee discloses a double-sided optical storage disk comprising a substrate having a microstructure formed on each side surface, where the microstructure is in the form of grooves (abstract) where grooves are analogous to track guides. Lee discloses, formed on each of the side surfaces from the substrate outward are a reflective layer, dielectric layer, recording layer and transparent protective layer (column 4, lines 27-34). Lee shows hills of a peaked hood shape in figure 4. Although Lee does not explicitly disclose the height of the peaked hood shape or grooves or the thickness of the protective layer, height and thickness are optimizable. It would have been obvious to one of ordinary skill in the art to optimize the components because discovering the optimum or workable values involves only routine skill in the art.

**Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.

*ZDF*

Lawrence D. Ferguson  
Examiner  
AU 1774

CYNTHIA H. KELLY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

*Cynthia H. Kelly*